Please type a plus sign (+) inside this box

## DATE FILED: December 10,

PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

		IATION DISCLOSURE MENT BY APPLICANT se as many sheets as necessary)	Complete If Known			
Su	bstitute for form 1449A/F	то		Application Number		
IN	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	Filed Herewith			
				First Named Inventor		
•	1741200			Group Art Unit		
	(Use as many	sheets as ned	cessary)	Examiner Name		
Sheet	1	of	7	Attorney Docket Number	MIT8178CONT	

				U.S. PATENT DOCUMENTS	S	
Examiner	Cite	U.S. Patent D	ocument	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant
Initials*	No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (If known)	Of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
KBA	A1	4,731,670		Allen et al.	03-15-1988	
199	B1	4,805,038		Seligson	02-14-1989	<u> </u>
	C1	5,115,344		Jaskie	05-19-1992	
	D1	5,202,785		Nelson	04-13-1993	
	E1	5,206,557		Bobbio	04-27-1993	
	F1	5,212,582		Nelson	05-18-1993	
	G1	5,233,456		Nelson	08-03-1993	
	H1	5,392,151		Nelson	02-21-1995	
	11	5,396,066		Ikeda et al.	03-07-1995	
	J1	5,781,670		Deacon et al.	07-14-1998	
	K1	5,794,023		Hobbs et al.	08-11-1998	
	L1	5,836,203		Martin et al.	11-17-1998	
	M1,	5,841,579		Bloom et al.	11-24-1998	
	N1	5,847,859		Murata	12-08-1998	
	01	5,870,221		Goossen	02-09-1999	
	P1	5,905,589		Tanaka et al.	05-18-1999	
	Q1	5,920,418		Shiono et al.	07-06-1999	
	R1	5,953,161		Troxell et al.	09-14-1999	
<u> </u>	S1	5,991,079		Furlani et al.	11-23-1999	
	T1	5,998,906		Jerman et al.	12-07-1999	
1/2	U1	6,004,912		Gudeman	12-21-1999	

			F	OREIGN PA	TENT DOCUMENTS			
Examiner Initials*	Cite	For	eign Patent Docu	ment	Name of Patentee or Applicant Of Cited Document	Date of Publication	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>8</sup> (if known)		of Cited Document MM-DD-YYY		<u> </u>
								┼
								-
			<u></u>					
								_
- <u></u>								-
								<u> </u>

Examiner		Date	2/1/12	
Signature /		Considered	7/8/0	not in conformance and not
*EXAMINER: Initial if reference con	sidered, whether or not citation is in co	onformance with MPEP 609. Drav	w line through citation it	not in conformance and not
considered. Include copy of this form	m with next communication to applican	π.	•	

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

## **DATE FILED:December 10,**

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	DELMOIK LICEUCION 7			Complete If Known			
Sub	bstitute for form 1449A/P	ΤΟ		Application Number			
IN	FORMATIO	N DIS	CLOSURE	Filing Date	Herewith		
	TATEMENT			First Named Inventor	Hung		
3	IVIEMEN		. 2.0,	Group Art Unit			
	(Use as many s	sheets as ne	cessary)	Examiner Name			
Sheet	2	2 of		Attorney Docket Number	MIT8178CONT		

				U.S. PATENT DOCUMENTS	3	
Examiner Initials*	Cite No.1	U.S. Patent D	Nind Code <sup>2</sup>	Name of Patentee or Applicant Of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
112	A2	6,014,257	<del></del>	Furlani et al.	01-11-2000	
1000	B2	6,031,652		Furlani et al.	02-29-2000	
1	C2	6,038,057		Brazas, Jr. et al.	03-14-2000	
	D2	6,061,166		Furlani et al.	05-09-2000	
	E2	6,067,183		Furlani et al.	05-23-2000	
	F2	6,088,148		Furlani et al.	07-11-2000	
	G2	6,072,620		Shiono et al.	06-06-2000	
<del></del>	H2	6,108,117		Furlani et al.	08-22-2000	
	12	6,130,770		Bloom	10-10-2000	
	J2	6,141,139		Furlani et al.	10-31-2000	
	K2	6,144,481		Kowarz et al.	11-07-2000	
	L2	6,169,624	B1	Godil et al.	01-02-2001	
	M2	6,175,443	B1	Aksyuk et al.	01-16-2001	
	N2	6,188,519	B1	Johnson	02-13-2001	
	O2	6,215,579	B1	Bloom et al.	04-10-2001	
	P2	6,233,087	B1	Hawkins et al.	05-15-2001	
<del></del>	Q2	6,238,581	B1	Hawkins et al.	05-29-2001	
_	R2	6,243,194	B1	Brazas, Jr. et al.	06-05-2001	
_	S2	6,252,697	B1	Hawkins et al.	06-26-2001	
1	T2	6,268,952	B1	Godil et al.	07-31-2001	
140)	U2	6,282,012	B1	Kowarz et al.	08-28-2001	

			F	OREIGN PA	TENT DOCUMENTS			
_	Cite	For	eign Patent Docur		Name of Patentee or Applicant Of Cited Document	Date of Publication of Cited Document MM-DD-YYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
Examiner Initials*	No. <sup>1</sup>	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
								<u> </u>
<u> </u>								
							-	
	<u> </u>							
	1	1						

Examiner
Signature

Considered

Considered

Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant commissioner for Patents, Washington, DC 20231.





PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete If Known			
Su	ubstitute for form 1449A/F	710		Application Number			
IN	NFORMATION DISCLOSUF	LOSURE	Filing Date	Herewith			
S	TATEMENT	BY AP	PLICANT	First Named Inventor	Hung		
				Group Art Unit			
	(Use as many	sheets as nece	essary)	Examiner Name			
Sheet	3	of	7	Attorney Docket Number	MIT8178CONT		

				U.S. PATENT DOCUMENTS	<u> </u>	
Examiner	Cite	U.S. Patent (	Document	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant
Initials*	No.1	Number	Kind Code <sup>2</sup> (If known)	Of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
145	A3	6,172,796	B1	Kowarz et al.	01-09-2001	
	B3	6,282,213	B1	Gutin et al.	08-28-2001	
	СЗ	6,284,560	B1	Jech, Jr. et al.	09-04-2001	
	D3	6,288,824	B1	Kastalsky	09-11-2001	
	E3	3,553,364		Lee	01-05-1971	
	F3	4,234,788		Palmer et al.	11-18-1980	
	G3	5,022,745		Zayhowski et al.	06-11-1991	
	НЗ	5,164,688		Larson	11-17-1992	
	13	5,168,249		Larson	12-01-1992	
	J3	5,175,521		Larson	12-29-1992	
	КЗ	5,291,502		Pezeshki et al.	03-01-1994	
	L3	5,311,360		Bloom et al.	05-10-1994	·
	М3	5,353,641		Tang	11-11-1994	
	N3	5,561,523		Blomberg et al.	11-01-1996	, <u> </u>
	O3	5,629,951		Changj-Hasnain et al.	05-13-1997	
	P3	5,640,133		MacDonald et al.	06-17-1997	
T	Q3	5,646,772		Yurke	07-08-1997	
	R3	5,654,819		Goossen et al.	08-05-1997	
	S3	5,661,592		Bornstein et al.	08-26-1997	
	ТЗ	5,696,662		Bauhahn	12-09-1997	
1/18	U3	5,757,536		Ricco et al.	05-26-1998	

			F	DREIGN PA	ATENT DOCUMENTS			
Examiner	Cite	F	oreign Patent Docum	ient	Name of Patentee or Applicant Of Cited Document	Date of Publication	Pages, Columns, Lines, Where Relevant	T <sup>6</sup>
Initials*	No. <sup>1</sup>	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>6</sup> (if known)		of Cited Document MM-DD-YYY	Passages or Relevant Figures Appear	
								<u>_</u>
						<u> </u>	•	
<del></del>		ļ						
					1			<del> </del>
			<del></del>					
								-
	-							
				<u> </u>			7/	
Examine	er /	1	//	1	Date	2/6	187	

\*EXAMINER: Initial irreference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.



## **DATE FILED: December**

er 1001
PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known Substitute for form 1449A/PTO **Application Number** INFORMATION DISCLOSURE Herewith **Filing Date First Named Inventor** Hung STATEMENT BY APPLICANT **Group Art Unit Examiner Name** (Use as many sheets as necessary) MIT8178CONT 7 Attorney Docket Number 4 of Sheet

				U.S. PATENT DOCUMENTS	<b>S</b>	
Examiner	Cite	U.S. Patent [	Document	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant
Initials*	No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (if known)	Of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
1401	A4	5,905,571		Butler et al.	05-18-1999	
	B4	5,739,945		Tayegati	04-14-1998	
	C4	5,966,235		Walker	10-12-1999	
	D4	5,978,127		Berg	11-02-1999	
1	E4	5,999,319		Castracane	12-07-1999	
1	F4	5,933,277		Troxell et al.	08-03-1999	
	G4	5,949,568		Koo et al.	09-07-1999	
	H4	5,969,848		Lee et al.	10-19-1999	
401	14	6,181,458		Brazasm Hr, et ak,	01-30-2001	
<u> </u>						-

		<u> </u>	F	OREIGN PA	TENT DOCUMENTS			
Examiner	Cite	For	eign Patent Docu	ment	Name of Patentee or Applicant Of Cited Document	Date of Publication	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
Initials*	No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)		of Cited Document MM-DD-YYY		
<del></del>								ļ
								╁
					<u></u>		<u> </u>	_

Examiner Signature	Chan	/ Il	Date Considered	3/8/13	
*EXAMINER: Initial i	f reference considered, w	hether or not citation is	s in conformance with MPEP 609. Di	raw line through citation if not in	conformance and r

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

considered. Include copy of this form with next communication to applicant.



DATE FILED: December 1

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

01

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known Substitute for form 1449A/PTO **Application Number** INFORMATION DISCLOSURE Herewith **Filing Date** Hung STATEMENT BY APPLICANT **First Named Inventor Group Art Unit Examiner Name** (Use as many sheets as necessary) MIT8178CONT of 7 **Attorney Docket Number** 5 Sheet

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Included name of the author (in CAPITAL LETTERS). Title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
KBA	<b>A</b> 5	FURLANI et al., "Analysis of grating light valves with partial surface electrodes,"  J. Appl. Phys., Vol. 83, No. 2, pp. 629-634, January 15, 1998.	
	B5	HUNG, "Positioning, Control, and Dynamics of Electrostatic Actuators for Use in Optical and RF Systems, Ph.D. Thesis, Massachusetts Institute of Technology, August 21, 1998.	
	C5	JERMAN et al., "Miniature Fabry-Perot Interferometers Micromachined in Silicon for use in Optical Fiber WDM Systems, IEEE 1991 Int. Conf. On Solid-State Sensors and Actuators, Digest of Technical Papers, pp. 372, 375, 1991.	
	D5	PETERSEN, "Micromechanical light modulator array fabricated on silicon," <i>Appl. Phys. Lett.</i> , Vol. 31, No. 8, pp. 521-523, October 1977.	
	E5	HUNG et al., "Leveraged Bending for Full-Gap Positioning With Electrostatic Actuation," Solid State Sensor and Actuator Workshop, Hilton Head, SC, Digest, pp. 83-86, June 8-11, 1998.	
	F5	BIFANO et al., "MEMs Deformable Mirrors for Adaptive Optics," Solid State Sensor and Actuator Workshop, Hilton Head, SC, Digest, pp. 71-74, June 8-11, 1988.	
	G5	SOLGAARD et al., "Deformable grating optical modulator," <i>Optics Letters</i> , Vol. 17, No. 9, pp. 688-690, May 1992.	
	H5	HORENSTEIN et al., "Electrostatic Effects in Micromachined Actuators for Adaptive Optics," Journal of Electrostatics, Vol. 42, pp. 69-81, 1997.	
	15	HOM, "Simulating electrostrictive deformable mirrors I. Nonlinear static analysis," Smart Mater. Struct., Vol. 8, pp. 691-699, 1999.	
	J5	HOM, Simulating electrostrictive deformable mirrors II. Nonlinear dynamic analysis," Smart Mater. Struct., Vol. 8, pp. 700-708, 1999.	
	K5	MALI et al., "Development of microelectromechanical deformable mirrors for phase modulation of light," Optical Eng., Vol. 36, No. 2, pp. 542-548, February 1997.	
	L5	COWEN et al., "Optical phase modulation using a refractive lenslet array and microelectromechanical deformable mirror," <i>Optical Eng.</i> , Vol. 37, No. 12, pp. 3237-3247, December 1998.	,
	M5	ZHU et al., "Adaptive control of a micromachined continuous-membrane deformable mirror for aberration compensation," <i>Applied Optics</i> , vol. 38, No. 1, pp. 168-176, January 1999.	
KA	N5	HORENSTEIN et al., "Real time optical correction using electrostatically actuated MEMs devices," <i>Journal of Electrostatics</i> , Vol. 46, pp. 91-101, 1999.	

IU			
Examiner	May all	Date Considered	ROY

Signature Considered Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

**DATE FILED: December 19** 

PTO/SB/08B (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

01

X Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

C.	bstitute for form 1449A/P	ro		Complete If Known			
Su	bstitute for form 1449AVF	10		Application Number			
IN	<b>IFORMATIO</b>	N DIS	CLOSURE	Filing Date	Herewith		
S	TATEMENT	BY AF	PPLICANT	First Named Inventor	Hung		
_				Group Art Unit		_	
(Use as many sheets as necessary)				Examiner Name		]	
Sheet	6	of	7	Attorney Docket Number	MIT8178CONT		

	***	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Includ		Included name of the author (in CAPITAL LETTERS). Title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
16 A6		COWAN et al., "Surface Micromachined Segmented Mirrors for Adaptive Optics," <i>IEEE Jnl. Of Selected Topics in Quantum Electronics</i> , Vol. 5, No. 1, pp. 90-101, January/February 1999.	
	B6	BIFANO et al., "Microelectromechanical Deformable Mirrors," IEEE Jnl. Of Selected Topics in Quantum Electronics, Vol. 5, No. 1, pp. 83-89, January/February 1999.	
	C6,	CHUNG et al., "Design and fabrication of 10x10 micro-spatial light modulator array for phase and amplitude modulation," Sensors and Actuators, Vol. 78, pp. 63-70, 1999.	
	D6	MALI, "A design-based approach to planarization in multilayer surface micromachining," <i>J. Micromech. Microeng.</i> , Vol. 9., pp. 294-299, 1999.	
	E6	GANI et al., "Variable gratings for optical switching: rigorous electromagnetic simulation and design," Optical Engineering, Vol. 38, No. 3, pp. 552-557, March 1999.	
	F6	F6 HORENSTEIN et al., "Differential capacitive position sensor for planar MEMs structures with vertical motion," <i>Sensors and Actuators</i> , Vol. 80, pp. 53-61, 2000.	
	G6	BIFANO et al., "Continuous-membrane surface-micromachined silicon deformable mirror," Optical Engineering, Vol. 36, No. 5, pp. 1354-1360, May 1997.	
	Н6	GUSTAFSON et al., "Micro-Actuated Mirrors for Beam Steering," in <i>Miniaturized systems with Micro-optics and Micromechanics II</i> , Motamedi et al, Eds., Proc. SPIE 3008, pp. 91-99, 1997.	
	16	BURNS et al., "Designs to improve polysilicon micromirror surface topology," in <i>Miniaturized</i> systems with Micro-optics and Micromechanics II, Motamedi et al, Eds., Proc. SPIE 3008, pp. 100-110, 1997	
	J6	BURNS et al., "Optical beam steering using surface micromachined gratings and optical phased arrays," in <i>Opt. Scanning Systems: Design and Appls.</i> , Proc. SPIE 3131, pp. 99-110, 1997.	
	K6	BURNS et al., "Investigation of the Maximum Optical Power Rating for a Micro-Electro-Mechanical Device, Proceedings, <i>Transducers '97</i> , pp. 335-338, Chicago, IL, June 16-19, 1997.	
	L6	BURNS et al., "Development of microelectromechanical variable blaze gratings," Sensors and Actuators A, Vol. 64, pp. 7-15, 1998.	,
	M6	BURNS et al., "Optical power induced damage to microelectromechanical mirrors," Sensors and Actuators A, Vol. 70, pp. 6-14, 1998.	
(11)	N6	BURNS et al., "Micro-electro-mechanical Variable Blaze Gratings," Proc., IEEE 10 <sup>th</sup> Annual Int. Workshop on MEMs: An Investigation of Microstructures, Sensors, Actuators, Machines, and Robots, pp. 55-60, 1997.	

10				
Examiner		Date	SIAa	
Signature /	Chi	Considered	0/8/8	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete If Known		
Ju	DSMALE TO TOTAL THE PARTY TO			Application Number		
IN	<b>IFORMATION</b>	DIS	CLOSURE	Filing Date	Herewith	
S	STATEMENT BY APPLICANT			First Named Inventor	Hung	
				Group Art Unit		
(Use as many sheets as necessary)			cessary)	Examiner Name		
Sheet	7	of	7	Attorney Docket Number	MIT8178CONT	

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Included name of the author (in CAPITAL LETTERS). Title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
ICAN AT		LEE et al., "Polymeric Tunable Optical Attenuator with an Optical Monitoring Tap for WDM Transmission Network," <i>IEEE Photonics Tech. Ltrs.</i> , Vol. 11, No. 5, pp. 590-592, May 1999.	
	В7	FORD et al., "Micromechanical Fiber-Optic Attenuator with 3 µs Response," Journal of Lightwave Technology, Vol. 16, No. 9, pp. 1663-1670, September 1998.	
	<b>C</b> 7	MIN et al., "Modeling, design, fabrication and measurement of a single layer polysilicon micromirror with initial curvature compensation," Sensors and Actuators, Vol. 78, pp. 8-17, 1999.	
	D7	Mélendez et al., "Spectrally selective gas cell for electrooptical infrared compact multigas sensor," Sensors and Actuators A, Vol. 46-47, pp. 417-421, 1995.	
	E7	ROSSBERG, "Silicon micromachined infrared sensor with tunable wavelength selectivity for application in infrared spectroscopy," <i>Sensors and Actuators A</i> , Vol. 46-47, pp. 413-416, 1995.	
	F7	BURNS et al., "Nonlinear flexures for stable deflection of an electrostatically actuator micromirror," in <i>Microelectronic Structs. And MEMs for Opt. Process. III</i> , Proc. SPIE 3226, pp. 125-136, 1997.	
	G7	SINCLAIR et al., "Synthetic spectra: a tool for correlation spectroscopy," <i>Applied Optics</i> , Vol. 36, No. 15, pp. 3342-3348, May 1997.	
	H7	SINCLAIR et al., "Synthetic infrared spectra," Optics Letters, Vol. 22, No. 13, pp. 1036-1038, July 1997.	
	17	HUNG et al., "The Polychromator: A MEMs Correlation Spectrometer," in <i>Microsystems</i> Technology Laboratories Annual Rpt., Massachusetts Institute of Technology, p. 57, May 1998.	
	J7	HUNG et al., "Electrostatically Actuated Microstructures for RF Tuning and Position-Control Applications," in <i>MEMs: Research and Applications in Microelectromechanical Systems</i> , Poster Session Guidebook, Massachusetts Institute of Technology Industrial Liaison Program, p. 4, March 1998.	
Chan	K7	HUNG et al., "Extending the Travel Range of Analog-Tuned Electrostatic Actuators," <i>Jnl. Of Microelectromechanical Systems</i> , Vol. 8, No. 4, pp. 497-505, December 1999.	
			1

Examiner Signature	Date Considered	3/403	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not ditation is in conformance with MPEP 609. Draw line anguigh citation if not in conformance and not considered. Include copy of this form with next communication to applicant.